

A high-level monthly briefing on operations and activities at the Department of Energy's Idaho National Engineering and Environmental Laboratory – Home of Science and Engineering Solutions. Work at the lab supports the Department's business lines of environmental quality, energy resources, national security and science.

■ ENVIRONMENTAL QUALITY – Waste Shipments Pass Century Mark

Shipments of transuranic waste continue to leave Idaho, en route to the Waste Isolation Pilot Plant (WIPP) in southeastern New Mexico. Earlier this month, the 100th such shipment departed. The waste is headed out of state in compliance with the 1995 Settlement Agreement among the Department of Energy, the state of Idaho and the Navy. That agreement mandates that 3,100 cubic meters of transuranic waste leave Idaho by the end of December 2002. It further requires that a total of 65,000 cubic meters of the material be shipped out of state by no later than the end of December 2018.

■ SCIENCE – Planning for New Subsurface Facility Advances

After months of identifying science needs and technical requirements, the Idaho National Engineering and Environmental Laboratory has awarded the conceptual design contract for the planned Subsurface Geosciences Laboratory. The Zimmer Gunsul Frasca Partnership, which played a key role in the building of the Environmental Molecular Sciences Laboratory at Pacific Northwest National Laboratory, is set to complete conceptual design of the Idaho facility by mid-January 2002. The Subsurface Geosciences Laboratory (SGL) at an estimated total project cost of \$140 million to \$170 million, will offer unique research capabilities needed to address the Department of Energy's environmental missions. The new facility will enable researchers to advance the fundamental understanding of biological, geological, chemical, and physical processes that affect contaminant behavior in the subsurface. The next step will be to seek successive approvals from DOE and Congress on the conceptual design, final detailed design and then construction. Facility construction could begin as early as 2005, and is scheduled for completion by 2007.

■ ENERGY RESOURCES – INEEL Efforts to Conserve Energy Lauded

The U.S. Department of Energy's Federal Energy Management Program has selected an INEEL technology as one of the best energy-saving projects in the nation. The INEEL's compressed natural gas fueling station is one of only 11 technology projects being singled out this year as part of the *You Have the Power* campaign. Posters featuring the INEEL technology will be distributed to federal facilities, and information on the fueling station will be posted on a DOE Headquarters web site (www.eren.doe.gov/femp/yhpt).

■ NATIONAL SECURITY – Advances in Telecommunications to be Tested in Idaho

The INEEL and Bechtel Telecommunications will collaborate on testing advanced technologies for telecommunications projects. The Idaho National Engineering and Environmental Laboratory and Bechtel have agreed to design and build a third generation or "3G" wireless network test bed at the Laboratory for wireless operators to perform extensive operational tests of 3G systems prior to market deployment. The agreement marks the first collaboration for telecommunications projects between Bechtel and the INEEL. The partnership includes performing independent and commercial research on evolving telecom standards as well as technologies for Bechtel's telecom customers and their vendors. It also will allow for testing new wireline and wireless products and technologies, including 3G wireless voice and data networks, data security, encryption and interoperability.

Editor's Note: *Intelligence* is part of a new family of publications from the INEEL, and replaces the former *Today and Tomorrow* news brief.

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